

Salt addition to reduce concentrate intake in young bulls

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Organic beef producers seek for additives that restrict intake of ad libitum fed concentrates to achieve 40:60 concentrate:forage ratio (EC Regulation 889/2008) without increasing labour consumption

Does **10% salt proportion** in the concentrate affect **performance, intake** and **health status**?

Material and Methods

Parda de Montaña young bulls (initial weight = 290 kg)

Experimental period: 42 days

Diet: ad libitum lucerne hay + concentrate with different salt (NaCl) content

0.5% salt: control (n=11)

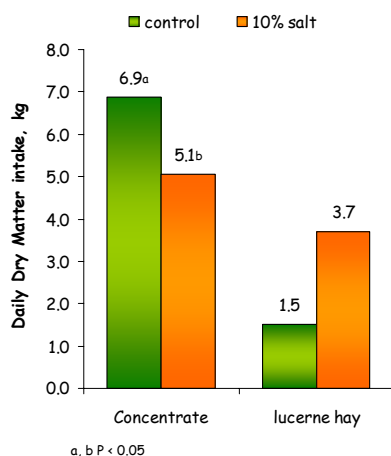
10% salt (n=11)



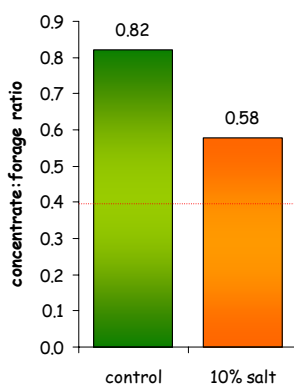
- Weekly weights → weight gains
- Daily Intake:
 - concentrate: per animal
 - lucerne hay: per group
 - water: per group
- Blood samples at 0, 14, 28, 42 d to obtain serum for:
 - Electrolyte balance: sodium, potassium and chlorine
 - Renal function: urea and creatinine

Results

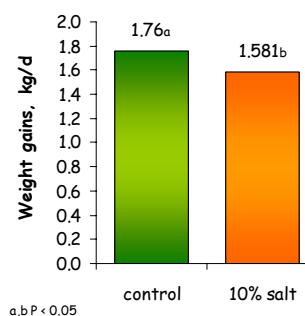
Reduction in concentrate intake and increase in forage intake



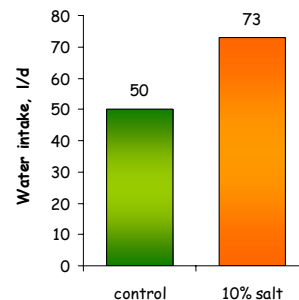
Improved c:f ratio



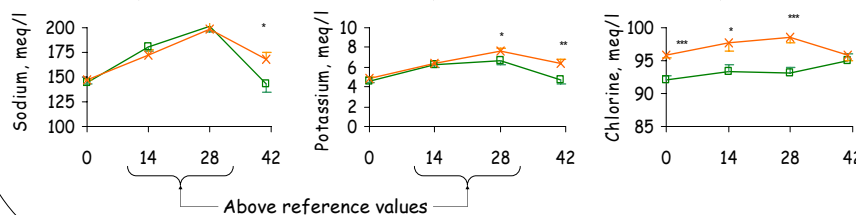
Reduction in weight gains



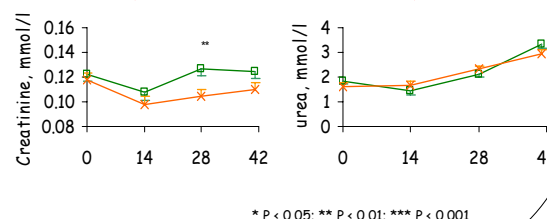
Increase in water intake



Affected slightly the electrolyte balance



No effects on renal function



Conclusions

- Addition of 10% salt reduced concentrate intake and weight gains without impairing the metabolic status
- Addition of 10% salt improved the c:f ratio but did not reach 40:60, compulsory in EU organic farming